

ABSTRACT

In an electromagnetic induction type speaker apparatus, individual constants are set in such a manner that the following formula is satisfied

$$N \times (R1 \times R2)^{1/2} / (2\pi \times L1 \times (1 - k^2)^{1/2}) \geq 20000$$

where R1 is the DC resistance of a primary coil 15; L1 is the inductance of the primary coil 15; N is the number of turns of the primary coil 15; R2 is the DC resistance of the secondary coil 18; L2 is the inductance of the secondary coil 18; and k is the coupling coefficient of the primary coil 15 and the secondary coil 18.

In addition, the constants L1 and L2 are selected in such a manner that the ratio of the inductance L1 and the inductance L2 becomes equal to the ratio of the DC resistance R1 and the DC resistance R2.